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1. TUNG, M EXAMINER

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ART UNIT  
2603

PAPER NUMBER

06/16/92

DATE MAILED:

THIS IS A CONTINUED COPY OF THE EXAMINATION OF THE RECORD OF YOUR APPLICATION.  
COMMISSIONER OF PATENTS AND TRADE MARKS.

☐ This application has been examined ☒ Responsive to communication filed on 2/21/92 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), — days from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

**Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:**

1. ☐ Notice of References Cited by Examiner, PTO-892. 2. ☐ Notice re Patent Drawing, PTO-948.  
3. ☒ Notice of Art Cited by Applicant, PTO-1449. 4. ☐ Notice of Informal Patent Application, Form PTO-152.  
5. ☐ Information on How to Effect Drawing Changes, PTO-1474. 6. ☐ \_\_\_\_\_

**Part II SUMMARY OF ACTION**

1. ☒ Claims 1-26 are pending in the application.
- Of the above, claims \_\_\_\_\_ are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☒ Claims 1-4 and 23-26 are allowed.
4. ☒ Claims 5 and 21 are rejected.
5. ☒ Claims 6-20 and 22 are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable. ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-848).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed on \_\_\_\_\_, has been ☐ approved. ☐ disapproved (see explanation).
12. ☐ Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11: 453 O.G. 213.

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1. 35 U.S.C. § 101 reads as follows:

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title".

2. Claims 5 and 21 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in the two-step test given by In re Freeman 197 USPQ 464 (CCPA 1980), as modified by In re Walter 205 USPQ 397 (CCPA 1982), and In re Abele 214 USPQ 682 (CCPA 1982).

The first step is to determine whether or not the claims directly or indirectly recite a mathematical algorithm. As can be seen by claim 5, claim 5 indirectly recites a mathematical algorithm by setting forth the step of "using a routing protocol to automatically predetermine---". As found on page 3, the claimed predetermining step is a mathematical algorithm since it is recited that "routing protocols are often associated with their own routing algorithms". Therefore, the claim indirectly recites a mathematical algorithm.

Now, the claim should be viewed without the mathematical algorithm to determine if what remains is otherwise statutory. In re Abele 214 USPQ 682, 686 and In re Gram 12 USPQ 1824, 1827.

With the mathematical algorithm taken out, what is remaining

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in the claims is a field of use limitation at lines 1-10. The Court has held that a field of use limitation cannot make a claim statutory by "attempting to limit the use of the formula to a particular technological environment". Diamond v. Diehr 209 USPQ 1, 10 (S CT 1981). Thus, applicant's field of use limitation fails to render the claim statutory.

A similar analog applies to the claim 21, with the determining step being an algorithm and the rest of the claim being a field of use limitation.

3. Claims 6-20, and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


4. Claims 1-4 and 23-26 are allowable over the prior art of record.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Min Jung whose telephone number is (703) 305-4363.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4750.



DOUGLAS W. OLMS  
SUPERVISORY PATENT EXAMINER  
ART UNIT 263

 M. JUNG:RWM  
June 10, 1992